

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/B2005/050221

International filing date (day/month/year)
19.01.2005

Priority date (day/month/year)
05.02.2004

International Patent Classification (IPC) or both national classification and IPC
INV. H01J61/72 H01J61/92

Applicant
KONINKLIJKE PHILIPS ELECTRONICS N.V.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1b/s(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk - Pays Bas
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl
Fax: +31 70 340 - 3016

Date of completion of
this opinion

see form
PCT/ISA/210

Authorized Officer

But, Gabriela-Ileana

Telephone No. +31 70 340-9537



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2005/050221

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material:

- ☐ a sequence listing
- ☐ table(s) related to the sequence listing

b. format of material:

- ☐ on paper
- ☐ in electronic form

c. time of filing/furnishing:

- ☐ contained in the international application as filed.
- ☐ filed together with the international application in electronic form.
- ☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/B2005/050221

Box No. V Reasoned statement under Rule 43b/s.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-8
	No: Claims	
Inventive step (IS)	Yes: Claims	1-8
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-8
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1 Prior art

Reference is made to the following documents:

D1: US-A-4 751 398 (ERTZ III ALEXANDER L [US]) 14 June 1988 (1988-06-14)

2 Independent claim 1 new and inventive

2.1 The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses a HID lamp (column 1, line 10) being operable in a first and a second mode of operation (column 4, lines 38-39) comprising:

- discharge vessel enclosing a discharge space and electrodes for maintaining the discharge and having a filling of mercury and an inert gas. These features are considered as implicitly disclosed, since they represent essential features. Only the filling of an HID lamp can be different from mercury, i. e. filling of metal halide or sodium are possible as well for a HID lamp.

The subject-matter of claim 1 therefore substantially differs from this known D1 in that at least one of the electrodes can be operated on a DC or AC power supply for drawing a discharge current across the electrode while the discharge lamp operates in the second mode of operation.

Claim 1 is therefore new (Article 33 (1) and (2) PCT).

The technical effect of this difference is that the discharge takes place in the vicinity of the electrode(s) and the two electrodes can be operated separately to produce the discharge.

The objective problem to be solved by the present invention may therefore be regarded as how to modify the lamp of D1 in order to produce the discharge in the vicinity of the electrodes and to operate the electrodes separately from each other.

2.2 Neither the cause of the discharge only near the electrodes by applying a current across the electrodes nor the possibility of separately operation of the electrode is expected and has been found disclosed or suggested in the prior art. Its derivation from the teachings of the document mentioned above appears to be not obvious. Claim 1 is therefore inventive (Article 33 (3) PCT).

3 Dependent claims

Claims 2-8 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.